

The Claims

1. (currently amended) A bacterial strain ~~for production of~~ producing polyhydroxyalkanoates wherein the bacterial strain is selected from the group consisting of *Ralstonia eutropha*, *Pseudomonas putida* and *Escherichia coli* and is genetically modified to express a heterologous nuclease gene, wherein the nuclease ~~gene product~~ is secreted into the periplasmic space and released when the bacteria is lysed, wherein the bacteria expresses a nuclease which is secreted into the periplasmic space in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours and reduce the viscosity of a cell lysate in a bacterial cell culture having a density of at least 50 g/l so that recovery of product is enhanced.
2. (cancelled)
3. (currently amended) The bacterial strain of claim 2 ~~1~~ which produces a polyhydroxyalkanoate to levels of at least 40% of its dry cell weight.
4. (previously presented) The bacterial strain of claim 1 for use in an aqueous process to manufacture poly(3-hydroxyalkanoate) granule suspension which is essentially free of nucleic acids.
5. (cancelled)
6. (original) The bacterial strain of claim 1 wherein the nuclease gene is a heterologous gene obtained from an organism other than the bacterial strain.

RESPONSE TO OFFICE ACTION

7. (currently amended) A bacterial strain ~~for production of~~ producing polyhydroxyalkanoates, wherein the bacterial strain is selected from the group consisting of *Ralstonia eutropha*, *Pseudomonas putida* and *Escherichia coli* and is genetically modified to express a heterologous nuclease gene integrated into the chromosome of the bacterial host, wherein the nuclease gene ~~product~~ is secreted into the periplasmic space and released when the bacteria is lysed, wherein the bacteria expresses a nuclease which is secreted into the periplasmic space in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours.

8-10. (cancelled)

11. (withdrawn – currently amended) A fermentation process comprising adding to a growth medium a bacterial strain ~~for production of~~ producing polyhydroxyalkanoates, wherein the bacterial strain is selected from the group consisting of *Ralstonia eutropha*, *Pseudomonas putida* and *Escherichia coli* and is genetically modified to express a heterologous nuclease gene, wherein the nuclease gene ~~product~~ is secreted into the periplasmic space and released when the bacteria is lysed, wherein the bacteria expresses a nuclease which is secreted into the periplasmic space in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours.

12. (withdrawn – currently amended) The process of claim 11, wherein the bacterial strain is grown to cell densities of at least 50 g/l, ~~and the nuclease gene product is released in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the~~

RESPONSE TO OFFICE ACTION

~~cells in less than 24 hours and reduce the viscosity of a cell lysate in a bacterial cell culture having a density of at least 50 g/l so that recovery of the product is enhanced.~~

13. (cancelled)

14. (withdrawn – previously presented) The process of claim 12 further comprising growing the bacterial strain to produce levels of at least 40% of its dry cell weight.

15. (withdrawn – previously presented) The process of claim 11 further comprising lysing the cells.

16. (withdrawn – previously presented) The process of claim 14 further comprising using an aqueous process to manufacture a poly(3-hydroxyalkanoates) granule suspension which is essentially free of nucleic acids.

Claims 17 and 18. (cancelled)

19. (withdrawn – currently amended) A fermentation process comprising adding to a growth medium a bacterial strain ~~for production of~~ producing polyhydroxyalkanoates, wherein the bacterial strain is selected from the group consisting of *Ralstonia eutropha*, *Pseudomonas putida* and *Escherichia coli* and is genetically modified to express a heterologous nuclease gene integrated into the chromosome of the bacterial strain, wherein the nuclease ~~gene-product~~ is secreted into the periplasmic space and released when the bacteria is lysed, wherein the bacteria expresses and secretes into the periplasma an amount of nuclease effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours.

Claims 20-23. (cancelled)